



Georgia-Pacific LLC

*Environmental Remediation
951 County Street
Milan, Michigan 48160
Telephone (734) 735-0780
Fax (404) 654-4701
E-mail gigriffi@gapac.com*

August 12, 2013

Ramon Mendoza
On-Scene Coordinator
United States Environmental Protection Agency
77 W. Jackson Blvd. Mail Code SE-5J
Chicago, IL 60604-3590

US EPA RECORDS CENTER REGION 5



Subject:

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Former Plainwell Impoundment Time-Critical Removal Action and Plainwell No. 2 Dam
Area Time-Critical Removal Action
Post Construction Monitoring and Maintenance

Dear Mr. Mendoza;

The Administrative Settlement Agreements and Orders on Consent for Removal Action (AOCs) for the Time-Critical Removal Actions (TCRAs) in the Plainwell No. 2 Dam Area includes a provision allowing the Respondent(s) to request changes to approved work plans. This letter serves as that request.

Section 5.7 of the Plainwell No. 2 Dam TCRA Design Report provides a general description of the post construction bank and vegetation monitoring to be performed during the three-year post construction period. The specifics of the monitoring program performed during the 2011 and 2012 monitoring periods were taken from the former Plainwell Impoundment monitoring program. Following the 2012 monitoring it was apparent that several of the specific monitoring methods used during the first two years of post construction monitoring no longer needed to be applied throughout the TCRA area. As such, the following two changes to the monitoring program were identified and verbally approved by US EPA and the river trustees in the spring of 2013.

1. Quantitative vegetation data (e.g., number of species present, relative population sizes) collected once annually for evaluation against performance standards to assess

the development of the desired plant community – Since achievement of the 85% ground cover metric was documented in 2011 (99%) and 2012 (99.5%), it is recommended that the detailed quadrant count be replaced with a qualitative visual observation and photo documentation in conjunction with tree and shrub count.

2. Bank Monitoring Methodologies - Transect Surveys and Bank Erosion Hazard Index (BEHI) were not any more effective than visual monitoring in identifying bank sections requiring maintenance or repairs. During 2011 and 2012, profiles were surveyed at 14 permanently-monumented transect locations to compare bank geometry to post-construction conditions. BEHI values were also calculated for 20 bank sections. Much of this work was completed for bank areas that received toe of bank armoring, which have shown no indication of erosion. For 2013 it is recommended that only transect surveys be performed in specified bank sections identified in consultation with the agency oversight during the Spring site inspection, to supplement the photo documented visual inspections.

Pursuant to Section XXVII, Paragraph 77 of the Plainwell Dam No. 2 Area TCRA AOC (Docket No. V-W-09-C-925) formal approval is requested to modify the previously agreed to bank monitoring program. A summary of the proposed 2013 bank monitoring program is attached:


Also, in follow-up to the June 11, 2013 Final Inspection of the former Plainwell Impoundment TCRA area and 3rd annual inspection of the Plainwell No.2 Dam TCRA area, Georgia-Pacific is providing the agencies with the additional information requested for; 1) the rock armor installed in Plainwell removal areas RA-4A and RA-6B and Plainwell No. 2 Dam area RA-3A, and 2) the survivability of the live stakes planted in RA-6B during the bank maintenance work completed in December 2012/January 2013.

Angular rock was used exclusively for armoring Plainwell RA-6B and Plainwell No. 2 RA-3A, and used only below the median water level, with river rock placed above the median water level at Plainwell RA-6B. Based on follow up inspections of the above bank areas, it appears that about 10 to 20 percent of the angular armor rock is fracturing and eroding. The angular rock used for the bank armor is marketed as "cobblestone limestone" and was supplied by Bellevue Stone Products from their quarry located near Grand Rapids, Michigan. The supplier has informed Terra Contracting, who purchased and installed the rock, that this type of occurrence is not atypical for the product they supplied and indicated that the majority of the degradation would occur in response to the first freeze/thaw cycle, after which only minor losses would be expected from the erodible portion of the rock. Based on USGS maps available for the Grand Rapids area of the quarry, the rock is from the Bayport Limestone Formation, a member of the Grand Rapids Group. This unit consists of a sandy yellow limestone which can be interrupted by layers of white sandstone and some dolomite. The differential erosion observed is most likely attributed to the sandstone inclusions of the Bayport Limestone. At this time it does not appear that the eroded rock is affecting the ability of the remaining rock to effectively protect the bank.

The supplier of the live stakes has also been contacted. The stakes that did not survive will be replaced with willow plants (instead of live stakes) during the 2013 fall planting season. In addition to the replanting in RA-6B, willow plants will be planted in RA-7, 8 and 9B in the buffer zone and landward of the existing rock bank armoring to further increase the density and depth of roots and increase the soil holding capability of the bank. This work was originally scheduled to be completed in spring 2013. This work will be documented in the 2013 Plainwell No. 2 Dam Bank Condition Monitoring Report.

We trust the above provides the requested information in follow up to the June 11, 2013 Final Inspection of the former Plainwell Impoundment TCRA area. We look forward to receipt of the Agency's approval of the 2012 Bank Condition Monitoring Report. Please contact me if you have any questions.

Sincerely,



Garry Griffith, PE
Georgia-Pacific LLC

Attachment: Proposed Changes to Plainwell No. 2 Dam Area Post-TCRA Monitoring for 2013

Copies:

Jim Saric, United States Environmental Protection Agency
Paul Bucholtz, Michigan Department of Environmental Quality
Mark Mills, Michigan Department of Natural Resources
Sharon Hanshue, Michigan Department of Natural Resources
Chase Fortenberry, Georgia-Pacific LLC
Garrett Bundy, Amec
Erik Hritsuk, ARCADIS

Proposed Changes to Plainwell No. 2 Dam Area Post-TCRA Monitoring for 2013

Prior Approach	Proposed Approach for 2013	Rationale
Tree and Shrub Survival Monitoring		
Tree and shrub count	Continue same	Document if survivability metric is met.
Bank Stability		
Visual observation and photo-documentation	Modify	Collect land-based and water-based photos to supplement discontinuation of BEHI and instrument survey
BEHI rating	Discontinue	Perform after site walk with regulatory oversight if areas of erosion are observed and it is decided that quantitative erosion potential data is needed in those specific locations (both BEHI and survey).
Instrument survey at 14 locations with highest potential for erosion	Discontinue	
Floodplain Vegetation Monitoring		
Herbaceous vegetation monitoring	Modify	Achieved ground cover metric in 2011 (99%) and 2012 (99.5%). Remove detailed quadrant count. Perform qualitative visual observation and photo documentation in conjunction with tree and shrub count.
Invasive Species Assessment	Continue same	Invasive species were identified in 2011 and 2012. A program for control of purple loosestrife is planned for 2013.